

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A plant for concentration of tomato juice, ~~wherein it comprises~~ said plant comprising:

~~\_\_\_\_\_ an evaporator (1) of known type,~~ provided with an external sleeve ~~(2),~~ in which a heating fluid circulates, and which surrounds a vertical tube bundle ~~(3),~~

said vertical tube bundle arranged in a central part ~~(1a)~~ of the evaporator ~~(1),~~ and comprising in which tubes (3) tubes in which the tomato juice circulates, the tubes ~~(3) being~~ divided into a plurality of sectors ~~(3a, 3b, 3c and 3d)~~ all operating at a same temperature and pressure and in which the tomato juice circulates in succession;

~~\_\_\_\_\_ an upper plate (4) and a lower plate (5),~~ which, together with the sleeve ~~(2),~~ delimit the central part ~~(1a),~~ on which the upper plate ~~(4)~~ and the lower plate ~~(5)~~ ends of the tubes ~~(3)~~ are keyed ~~in order so~~ that the upper ends of the tubes open into an inlet zone ~~(4a)~~ of the evaporator in which the tomato juice is distributed ~~(1),~~ and the lower ends of the tubes ~~(3)~~ open into a bottom zone which is a separation chamber ~~(5a)~~ of the evaporator ~~(1);~~

~~means for circulating (6a, 6b, 6c) of known type,~~  
circulating members for removing the tomato juice from ~~a one of~~  
said plurality of sectors ~~sector~~ of the separating chamber ~~(5a)~~  
and sending the tomato juice to an inlet zone of a successive  
~~sector~~ one of said plurality of sectors;

           at least one heat exchanger ~~(7) of known type~~ arranged  
externally of the evaporator ~~(1)~~ and divided into a plurality of  
sectors ~~(7a, 7b, 7c)~~ in each said sector ~~of which sectors~~ the  
tomato juice exiting from ~~a the~~ sector of tubes ~~(3a, 3b, 3c)~~ of  
the evaporator ~~(1)~~ is heated to a same temperature as a  
temperature present in the central part ~~(1a)~~ of the evaporator  
~~(1)~~, before being sent on to a successive sector.

2. (currently amended) The plant of claim 1, wherein ~~it~~  
said plant further comprises:

           a compressor ~~(8) of known type~~ for aspirating steam from  
the separation chamber ~~(5a)~~ of the evaporator (1), and for  
compressing the steam and for introducing the steam into the  
central part ~~(1a)~~ of the evaporator ~~(1)~~;

           a gas turbine ~~(9) of known type~~, powered by live steam  
coming from a boiler ~~(10)~~ and powering the compressor ~~(8)~~;

           wherein discharge steam from the gas turbine ~~(9)~~  
~~constituting constitutes~~ a heating fluid necessary for operation  
of the plant.

3. (currently amended) The plant of claim 2, wherein ~~it~~  
said plant further comprises:

         a steam ejector ~~(11)~~ of known type,  
         a primary fluid ~~of which is~~ comprising the discharge steam  
coming from the gas turbine ~~(9)~~,  
         ~~which~~ wherein the steam ejector ~~(11)~~ extracts heating  
fluid from the central part ~~(1a)~~ of the evaporator ~~(1)~~, wherein  
fluid exiting from the steam ejector ~~(11)~~ ~~constituting~~ constitutes  
the heating fluid for the heat exchanger ~~(7)~~.

4. (currently amended) The plant of claim 1, wherein: a  
temperature internal of the central zone ~~(1a)~~ of the evaporator  
is ~~comprised~~ between 72° and 80°C; a temperature internal of the  
separation chamber ~~(5a)~~ of the evaporator ~~(1)~~ is ~~comprised~~  
between 67° and 75°C.